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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,757	03/31/2005	Leonard Borgstrom	6485-0042WOUS	8919

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EXAMINER

COOLEY, CHARLES E

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/506,757

Applicant(s)

BORGSTROM ET AL.

Examiner

Charles E. Cooley

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09082004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Art Unit: 1723

NON-FINAL OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Priority

2. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All of the CERTIFIED copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Information Disclosure Statement

3. Note the attached PTO-1449 forms submitted with the Information Disclosure Statement filed 8 SEP 2004.

Specification

4. The substitute specification filed 8 SEP 2004 is approved and has been entered but note the following objections:

Art Unit: 1723

5. The substitute specification filed 8 SEP 2004 is objected to because of the following informalities:

- a. Paragraph [0029]: replace "351" with --35°--.
- b. Paragraph [0033]: replace "6f" with --of--.

Appropriate correction is required.

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed (MPEP 606.01).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

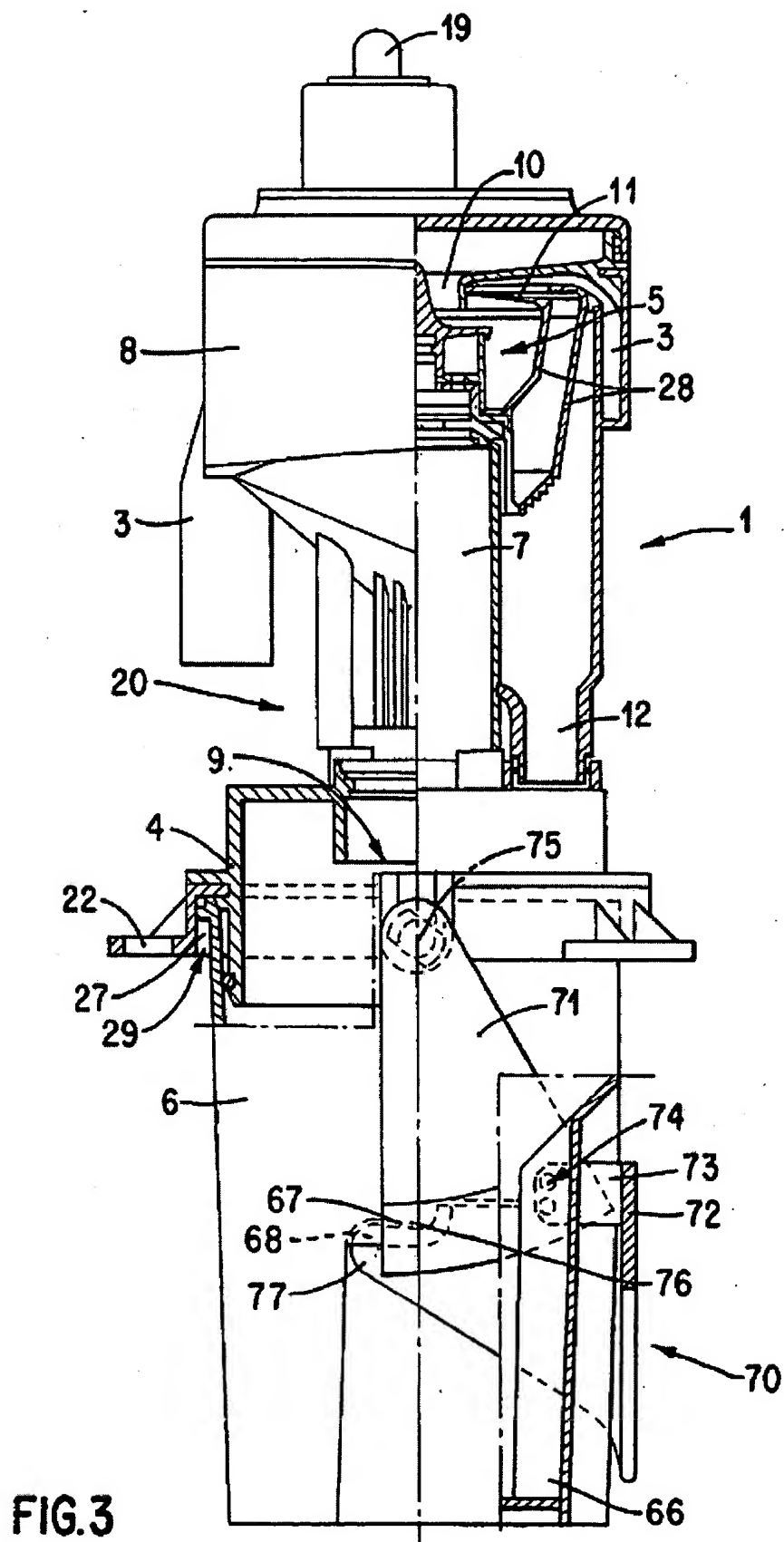
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 10, 11, 12, 13, 16, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by TRAWOGER et al. (US 5,484,282).**

The patent to TRAWOGER '282 discloses a centrifugal separator 1 including a centrifugal rotor 5 arranged for rotation around a substantially vertical rotational axis 66, the centrifugal rotor having a rotor body 28 delimiting a separation chamber, and a pumping member 9, that is arranged to rotate with the rotor body and to extend during the operation of the centrifugal rotor downwardly from the rotor body and into a liquid body 6, situated under the rotor body, for pumping of liquid from the liquid body into the

Art Unit: 1723

rotor body, the pumping member 9 having on an outside thereof, a pumping surface 18 facing away from the rotational axis, extending mainly rotational-symmetrically around the rotational axis and being arranged to have contact with a free liquid surface on said liquid body in an area extending around the pumping member, the pumping surface 18 on the outside of the pumping member, at least along a part of the axial extension of the pumping member in said area, having a generatrix forming an angle within the recited range with respect to the rotational axis 66 such that the pumping member along said part of its axial extension defines increasing diameter from below and upwards as seen in Figs. 4 and 6, so that upon rotation of the rotor liquid will flow upwards from the free liquid surface on the outside of the pumping member 9, and wherein the rotor delimits a receiving space proximate 10 situated so that it receives liquid that upon rotation of the rotor has been brought to flow upwards from the free liquid surface on the outside of the pumping member 9; wherein means 11 are arranged to maintain a free liquid surface in the separation chamber of the centrifugal rotor at a first radial distance from the rotational axis 66, said receiving space communicating with the separation chamber at a second radial distance from the rotational axis greater than the first radial distance; wherein a driving device 7 for rotation of the centrifugal rotor supports the pumping member and the rotor body; the separation chamber has two outlets (3 and/or 11) and 12 at different radial distances from the rotational axis 66 of the rotor for the respective separated phases of different densities with all of the recited structure being depicted in the Figures below:



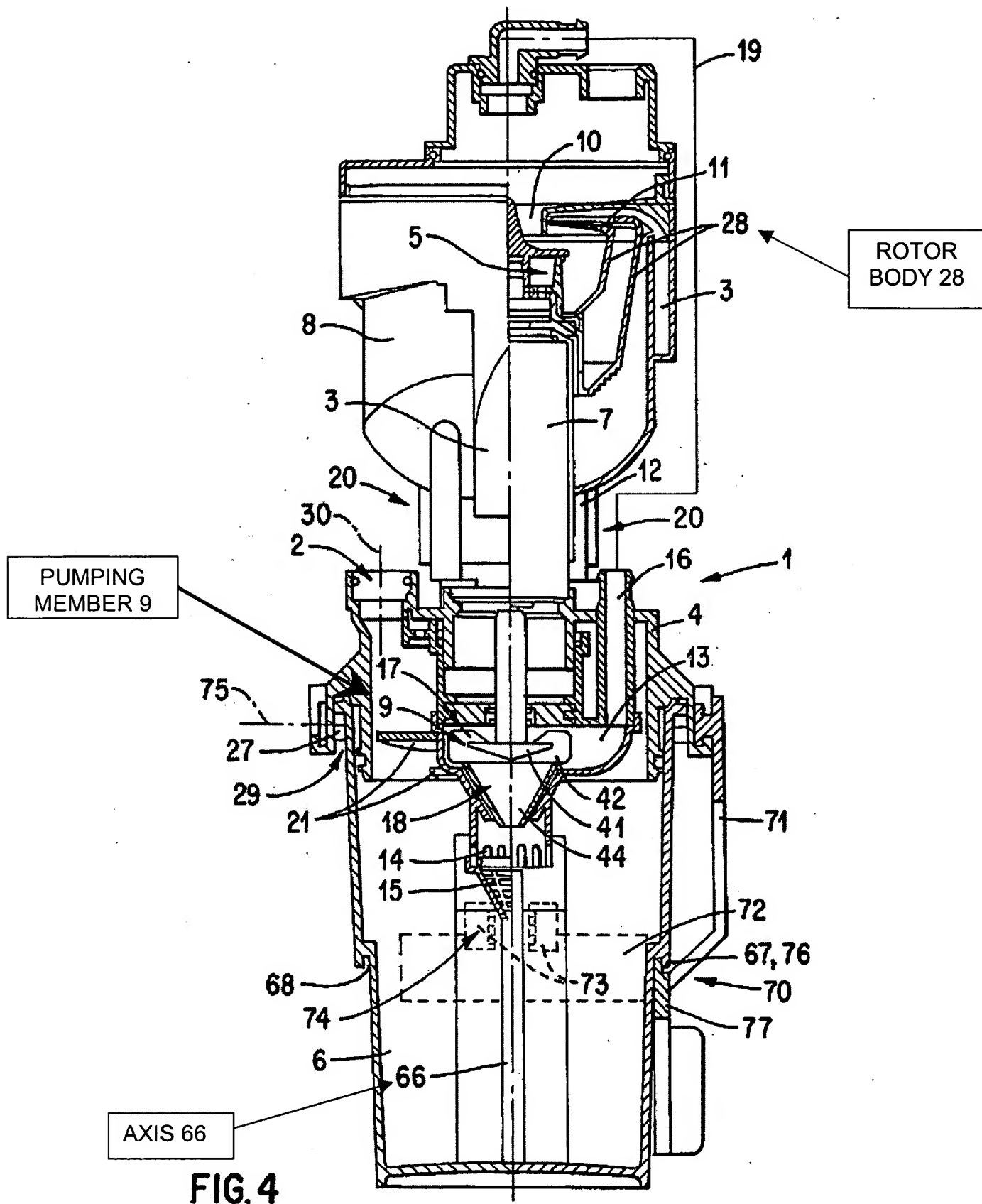


FIG. 6

Allowable Subject Matter

9. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or fairly suggest the rotor body, during operation of the centrifugal rotor, extending downwards to a level such that the rotor body surrounds an upper part of the pumping surface of the pumping member somewhat above the free liquid surface or the pumping member has a continuous surface extending from the pumping surface into a part of the receiving space of the rotor, which is arranged to contain liquid during operation of the rotor.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art discloses centrifuges with pump means.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Art Unit: 1723

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Charles E. Cooley", followed by a stylized flourish.

Charles E. Cooley
Primary Examiner
Art Unit 1723

1 October 2005